#### WHAT IS CLAIMED IS:

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A compound having the formula:

W is selected from the group consisting of O and S;

X is selected from the group consisting of: 21

a)  $-NR^4$ -, b)  $-NR^4NR^4$ -, and c) -S-; 22

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L is C_{1-6} alkyl optionally substituted with one or more \mathbb{R}^4 groups;
23
               R<sup>1</sup>, at each occurrence, independently is selected from the group consisting of:
24
                     a) F, b) Cl, c) Br, d) I, e) -CF_3, f) -OR^7, g) -CN, h) -NO_2, i) -NR^7R^7, j) -C(O)R^7,
25
                     k) -C(O)OR^7, l) -OC(O)R^7, m) -C(O)NR^7R^7, n) -NR^7C(O)R^7, o) -OC(O)NR^7R^7.
26
                     p) -NR^{7}C(O)OR^{7}, q) -NR^{7}C(O)NR^{7}R^{7}, r) -C(S)R^{7}, s) -C(S)OR^{7}, t) -OC(S)R^{7}.
27
                     u) -C(S)NR^{7}R^{7}, v) -NR^{7}C(S)R^{7}, w) -OC(S)NR^{7}R^{7}, x) -NR^{7}C(S)OR^{7},
28
                     y) -NR^{7}C(S)NR^{7}R^{7}, z) -C(NR^{7})R^{7}, aa) -C(NR^{7})OR^{7}, bb) -OC(NR^{7})R^{7},
20
                     cc) -C(NR^7)NR^7R^7, dd) -NR^7C(NR^7)R^7, ee) -OC(NR^7)NR^7R^7,
30
                     ff) -NR^7C(NR^7)OR^7, gg) -NR^7C(NR^7)NR^7R^7, hh) -S(O)_pR^7, ii) -SO_2NR^7R^7, and
31
                     jj) R';
32
               R<sup>2</sup>, at each occurrence, independently is selected from the group consisting of:
33
                      a) F, b) Cl, c) Br, d) I, e) -CF_3, f) -OR^7, g) -CN, h) -NO_2, i) -NR^7R^7, j) -C(O)R^7,
34
                     k) -C(O)OR^7, l) -OC(O)R^7, m) -C(O)NR^7R^7, n) -NR^7C(O)R^7, o) -OC(O)NR^7R^7,
35
                     p) -NR^{7}C(O)OR^{7}, q) -NR^{7}C(O)NR^{7}R^{7}, r) -C(S)R^{7}, s) -C(S)OR^{7}, t) -OC(S)R^{7},
36
                      u) -C(S)NR^7R^7, v) -NR^7C(S)R^7, w) -OC(S)NR^7R^7, x) -NR^7C(S)OR^7,
37
                      y) -NR^{7}C(S)NR^{7}R^{7}, z) -C(NR^{7})R^{7}, aa) -C(NR^{7})OR^{7}, bb) -OC(NR^{7})R^{7},
38
                      cc) -C(NR^7)NR^7R^7, dd) -NR^7C(NR^7)R^7, ee) -OC(NR^7)NR^7R^7,
39
                      ff) -NR^7C(NR^7)OR^7, gg) -NR^7C(NR^7)NR^7R^7, hh) -S(O)_pR^7, ii) -SO_2NR^7R^7, and
40
                      jj) R^7;
41
               R<sup>3</sup> is selected from the group consisting of:
42
                      a) -OR^7, b) -NR^7R^7, c) -C(O)R^7, d) -C(O)OR^7, e) -OC(O)R^7, f) -C(O)NR^7R^7,
43
                      g) -NR^{7}C(O)R^{7}, h) -OC(O)NR^{7}R^{7}, i) -NR^{7}C(O)OR^{7}, j) -NR^{7}C(O)NR^{7}R^{7},
44
                      k) -C(S)R^{7}, l) -C(S)OR^{7}, m) -OC(S)R^{7}, n) -C(S)NR^{7}R^{7}, o) -NR^{7}C(S)R^{7},
45
                      p) -OC(S)NR^{7}R^{7}, q) -NR^{7}C(S)OR^{7}, r) -NR^{7}C(S)NR^{7}R^{7}, s) -C(NR^{7})R^{7}.
46
                      t) -C(NR^7)OR^7, u) -OC(NR^7)R^7, v) -C(NR^7)NR^7R^7, w) -NR^7C(NR^7)R^7,
47
                      x) -OC(NR^7)NR^7R^7, y) -NR^7C(NR^7)OR^7, z) -NR^7C(NR^7)NR^7R^7, aa) -S(O)_nR^7,
48
                      bb) -SO_2NR^7R^7, and cc) R^7;
49
                R<sup>4</sup>, at each occurrence, independently is selected from the group consisting of:
 50
                      a) H, b) =O, c) =S, d) =NR<sup>5</sup>, e) =NOR<sup>5</sup>, f) =N-NR<sup>5</sup>R<sup>5</sup>, g) -OR^5, h) -NO_2, i) -NR^5R^5,
 51
                      j) -C(O)R^5, k) -C(O)OR^5, l) -OC(O)R^5, m) -C(O)NR^5R^5, n) -NR^5C(O)R^5,
 52
                      o) -OC(O)NR^5R^5, p) -NR^5C(O)OR^5, q) -NR^5C(O)NR^5R^5, r) -C(S)R^5,
 53
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s) -C(S)OR^5, t) -OC(S)R^5, u) -C(S)NR^5R^5, v) -NR^5C(S)R^5, w) -OC(S)NR^5R^5.
54
                      x) -NR^5C(S)OR^5, y) -NR^5C(S)NR^5R^5, z) -C(NR^5)R^5, aa) -C(NR^5)OR^5,
55
                      bb) -OC(NR^5)R^5, cc) -C(NR^5)NR^5R^5, dd) -NR^5C(NR^5)R^5, ee) -OC(NR^5)NR^5R^5,
56
                      ff) -NR^5C(NR^5)OR^5, gg) -NR^5C(NR^5)NR^5R^5, hh) -S(O)_pR^5, and ii) R^5;
57
               R<sup>5</sup>, at each occurrence, independently is selected from the group consisting of:
58
                      a) H, b) C_{1-6} alkyl, c) -C(O)-C_{1-6} alkyl, and d) -C(O)O-C_{1-6} alkyl,
59
                               wherein any of b) – d) optionally is substituted with one or more R^6 groups;
60
               R<sup>6</sup>, at each occurrence, independently is selected from the group consisting of:
61
                      a) -OH, b) -OC<sub>1-6</sub> alkyl, c) -SH, d) -NO<sub>2</sub>, e) -NH<sub>2</sub>, f) -NHC<sub>1-6</sub> alkyl,
62
                      g) -N(C_{1-6} alkyl)<sub>2</sub>, h) -C(O)H, i) -C(O)OH, j) -C(O)C_{1-6} alkyl,
63
                      k) -OC(O)C<sub>1-6</sub> alkyl, l) -C(O)OC<sub>1-6</sub> alkyl, m) -C(O)NH<sub>2</sub>, n) -C(O)NHC<sub>1-6</sub> alkyl,
64
                      o) -C(O)N(C_{1-6} \text{ alkyl})_2, p) -NHC(O)C_{1-6} \text{ alkyl}, and q) -S(O)_pC_{1-6} \text{ alkyl};
65
                R<sup>7</sup>, at each occurrence, independently is selected from the group consisting of:
66
                      a) H, b) C<sub>1-6</sub> alkyl, c) C<sub>2-6</sub> alkenyl, d) C<sub>2-6</sub> alkynyl, e) C<sub>3-14</sub> saturated, unsaturated, or
67
                      aromatic carbocycle, f) 3-14 membered saturated, unsaturated, or aromatic
68
                      heterocycle comprising one or more heteroatoms selected from the group consisting
69
                      of nitrogen, oxygen, and sulfur, g) -C(O)-C<sub>1-6</sub> alkyl, h) -C(O)-C<sub>2-6</sub> alkenyl,
70
                      i) -C(O)-C<sub>2-6</sub> alkynyl, j) -C(O)-C<sub>3-14</sub> saturated, unsaturated, or aromatic carbocycle,
71
                      k) -C(O)-3-14 membered saturated, unsaturated, or aromatic heterocycle comprising
                      one or more heteroatoms selected from the group consisting of nitrogen, oxygen,
73
                      and sulfur, 1) -C(O)O-C<sub>1-6</sub> alkyl, m) -C(O)O-C<sub>2-6</sub> alkenyl,
74
                      n) -C(O)O-C<sub>2-6</sub> alkynyl, o) -C(O)O-C<sub>3-14</sub> saturated, unsaturated, or aromatic
75
                      carbocycle, and p) -C(O)O-3-14 membered saturated, unsaturated, or aromatic
76
                      heterocycle comprising one or more heteroatoms selected from the group consisting
77
78
                       of nitrogen, oxygen, and sulfur,
                               wherein any of b) – p) optionally is substituted with one or more R^8 groups;
79
                R<sup>8</sup>, at each occurrence, is independently selected from the group consisting of:
80
                      a) F, b) Cl, c) Br, d) I, e) = O, f) = S, g) = NR^9, h) = NOR^9, i) = N-NR^9R^9, j) - CF_3, k) -
81
                      OR^9, 1) -CN, m) -NO<sub>2</sub>, n) -NR<sup>9</sup>R<sup>9</sup>, o) -C(O)R<sup>9</sup>, p) -C(O)OR<sup>9</sup>, q) -OC(O)R<sup>9</sup>,
82
                      r) -C(O)NR^9R^9, s) -NR^9C(O)R^9, t) -OC(O)NR^9R^9, u) -NR^9C(O)OR^9,
83
                      v) -NR^9C(O)NR^9R^9, w) -C(S)R^9, x) -C(S)OR^9, y) -OC(S)R^9, z) -C(S)NR^9R^9,
84
                       aa) -NR^9C(S)R^9, bb) -OC(S)NR^9R^9, cc) -NR^9C(S)OR^9, dd) -NR^9C(S)NR^9R^9,
85
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86	ee) $-C(NR^9)R^9$ , ff) $-C(NR^9)OR^9$ , gg) $-OC(NR^9)R^9$ , hh) $-C(NR^9)NR^9R^9$ ,
87	ii) -NR <sup>9</sup> C(NR <sup>9</sup> )R <sup>9</sup> , jj) -OC(NR <sup>9</sup> )NR <sup>9</sup> R <sup>9</sup> , kk) -NR <sup>9</sup> C(NR <sup>9</sup> )OR <sup>9</sup> ,
88	11) $-NR^9C(NR^9)NR^9R^9$ , mm) $-S(O)_pR^9$ , nn) $-SO_2NR^9R^9$ , and oo) $R^9$ ;
89	R <sup>9</sup> , at each occurrence, independently is selected from the group consisting of:
90	a) H, b) C <sub>1-6</sub> alkyl, c) C <sub>2-6</sub> alkenyl, d) C <sub>2-6</sub> alkynyl, e) C <sub>3-14</sub> saturated, unsaturated, or
91	aromatic carbocycle, f) 3-14 membered saturated, unsaturated, or aromatic
92	heterocycle comprising one or more heteroatoms selected from the group consisting
93	of nitrogen, oxygen, and sulfur, g) -C(O)-C <sub>1-6</sub> alkyl, h) -C(O)-C <sub>2-6</sub> alkenyl,
94	i) $-\bar{C}(O)$ - $C_{2-6}$ alkynyl, j) - $C(O)$ - $C_{3-14}$ saturated, unsaturated, or aromatic carbocycle,
95	k) -C(O)-3-14 membered saturated, unsaturated, or aromatic heterocycle comprising
96	one or more heteroatoms selected from the group consisting of nitrogen, oxygen,
97	and sulfur, l) $-C(O)O-C_{1-6}$ alkyl, m) $-C(O)O-C_{2-6}$ alkenyl,
98	n) -C(O)O-C <sub>2-6</sub> alkynyl, o) -C(O)O-C <sub>3-14</sub> saturated, unsaturated, or aromatic
99	carbocycle, and p) -C(O)O-3-14 membered saturated, unsaturated, or aromatic
100	heterocycle comprising one or more heteroatoms selected from the group consisting
101	of nitrogen, oxygen, and sulfur,
102	wherein any of $b$ ) – $p$ ) optionally is substituted with one or more moieties
103	selected from the group consisting of:
104	a) F, b) Cl, c) Br, d) I, e) -CF <sub>3</sub> , f) -OH, g) -OC <sub>1-6</sub> alkyl, h) -SH,
105	i) $-SC_{1-6}$ alkyl, j) $-CN$ , k) $-NO_2$ , l) $-NH_2$ , m) $-NHC_{1-6}$ alkyl,
106	n) -N( $C_{1-6}$ alkyl) <sub>2</sub> , o) -C(O) $C_{1-6}$ alkyl, p) -OC(O) $C_{1-6}$ alkyl,
107	q) -C(O)OC <sub>1-6</sub> alkyl, r) -C(O)NH <sub>2</sub> , s) -C(O)NHC <sub>1-6</sub> alkyl,
108	t) -C(O)N(C <sub>1-6</sub> alkyl) <sub>2</sub> , u) -NHC(O)C <sub>1-6</sub> alkyl, v) -SO <sub>2</sub> NH <sub>2</sub> -,
109	w) $-SO_2NHC_{1-6}$ alkyl, x) $-SO_2N(C_{1-6}$ alkyl) <sub>2</sub> , and
110	y) $-S(O)_pC_{1-6}$ alkyl;
111	m is 0, 1, 2, 3, or 4;
112	n is 0, 1, 2, 3, or 4; and
113	p, at each occurrence, independently is 0, 1, or 2,
114	and wherein the compound does not have the formula selected from the group consisting
115	c.f.

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1 2. The compound according to claim 1, having the formula:

$$(R^1)_m (R^2)_n$$
  $O$   $H_2C-R^3$ 

or a pharmaceutically acceptable salt, ester or prodrug thereof,

wherein A, B, L, M, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, X, m, and n are defined as described in claim 1.

1 3. The compound according to claim 1 or 2, having the formula:

$$(R^1)_m (R^2)_n$$
 O  $H_2C-R^3$ 

or a pharmaceutically acceptable salt, ester or prodrug thereof,

wherein A, B, L, M, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, X, m, and n are defined as described in claim 1.

4. The compound according to any one of claims 1-3, wherein

A is selected from the group consisting of phenyl and pyridyl;

B is selected from the group consisting of phenyl and pyridyl;

4 m is 0, 1, or 2; and

2

2

2

5 n is 0, 1, or 2.

1 5. The compound according to any one of claims 1-4, wherein A-B is:

$$A = \begin{pmatrix} R^2 \\ - \\ - \end{pmatrix} = \begin{cases} - \\ \xi - \end{cases}$$

wherein A, R<sup>2</sup>, and n are defined as described in claim 1.

1 6. The compound according to claim 5, wherein A-B is:

wherein A is defined as described in claim 1.

1 7. The compound according to claim 5, wherein A-B is:

wherein A is defined as described in claim 1.

1 8. The compound according to any one of claims 1-7, wherein A-B is:

wherein B is defined as described in claim 1.

1 9. The compound according to any one of claims 1-7, wherein A-B is:

wherein B is defined as described in claim 1.

1 10. The compound according to any one of claims 1-9, wherein R<sup>3</sup> is -NHC(O)R<sup>7</sup>.

1 11. The compound according to claim 10, wherein R<sup>3</sup> is -NHC(O)CH<sub>3</sub>.

1 12. The compound according to any one of claims 1-9, wherein R<sup>3</sup> is:

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2

1 13. The compound according to claim 1 or 2, having the formula:

$$(R^1)_m (R^2)_n$$
 $M-X-L-A-B-N$ 
 $H_2C-N$ 
 $CH_3$ 

- or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein A, B, L, M, R<sup>1</sup>, R<sup>2</sup>, X, m, and n are defined as described in claim 1.
- 1 14. The compound according to claim 1 or 2, having the formula:

$$M-X-L-A$$
 $H_2C-R^3$ 

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein A, L, M, R<sup>1</sup>, R<sup>3</sup>, X, and m are defined as described in claim 1.
- 1 15. The compound according to claim 14, having the formula:

$$M-X-L-A$$
 $H_2C-N$ 
 $CH_3$ 

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein A, L, M, R<sup>1</sup>, X, and m are defined as described in claim 1.
- 1 16. The compound according to claim 14, having the formula:

$$M-X-L$$

$$F$$

$$H_2C-R^3$$

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, R<sup>3</sup>, and X are defined as described in claim 1.
- 1 17. The compound according to claim 16, having the formula:

3 or a pharmaceutically acceptable salt, ester or prodrug thereof,

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- wherein L, M, and X are defined as described in claim 1.
- 1 18. The compound according to claim 14, having the formula:

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, R<sup>3</sup>, and X are defined as described in claim 1.
- 1 19. The compound according to claim 18, having the formula:

$$M-X-L-N-O-N-O-CH_3$$

- or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, and X are defined as described in claim 1.
- 1 20. The compound according to claim 1 or 2, having the formula:

$$M-X-L-A-F$$

$$H_2C-R^3$$

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein A, L, M, R<sup>1</sup>, R<sup>3</sup>, X, and m are defined as described in claim 1.
- 1 21. The compound according to claim 20, having the formula:

$$M-X-L-A$$
 $F$ 
 $H_2C-N$ 
 $CH_3$ 

- or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein A, L, M, R<sup>1</sup>, X, and m are defined as described in claim 1.
- 1 22. The compound according to claim 20, having the formula:

2

2

2

- or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, R<sup>3</sup>, and X are defined as described in claim 1.
- 1 23. The compound according to claim 22, having the formula:

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, and X are defined as described in claim 1.
- 1 24. The compound according to claim 20, having the formula:

$$M-X-L-N-O$$
 $H_2C-R^3$ 

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, R<sup>3</sup>, and X are defined as described in claim 1.
- 1 25. The compound according to claim 24, having the formula:

$$M-X-L-N-0$$
 $H_2C-N-CH_3$ 

- 3 or a pharmaceutically acceptable salt, ester or prodrug thereof,
- wherein L, M, and X are defined as described in claim 1.
- 1 26. The compound according to any one of claims 1-25, wherein M is:

- and R<sup>4</sup>, at each occurrence, independently is defined as described in claim 1.
- 1 27. The compound according to claim 26, wherein M is:

2

- and  $\mathbb{R}^4$  is defined as described in claim 1.
- 1 28. The compound according to any one of claims 1-25, wherein M is:

- and R<sup>4</sup>, at each occurrence, independently is defined as described in claim 1.
- 1 29. The compound according to claim 28, wherein M is:

$$\begin{array}{c} R^4 \\ H_2 N \\ O \end{array},$$

- and R<sup>4</sup> is defined as described in claim 1.
- 1 30. The compound according to any one of claims 1-29, wherein X is –NH-.
- 1 31. The compound according to any one of claims 1-29, wherein X is:

- 1 32. A compound having the structure corresponding to any one of the structures listed in
- 2 Table 1, or a pharmaceutically acceptable salt, ester, or prodrug thereof.
- 1 33. A pharmaceutical composition comprising one or more compounds according to any one
- 2 of claims 1-32 and a pharmaceutically acceptable carrier.
- 1 34. A method of treating a microbial infection in a mammal comprising the step of
- 2 administering to the mammal an effective amount of one or more compounds according to any
- 3 one of claims 1-32.
- 1 35. A method of treating a fungal infection in a mammal comprising the step of administering
- 2 to the mammal an effective amount of one or more compounds according to any one of claims
- 3 1-32.
- 1 36. A method of treating a parasitic disease in a mammal comprising the step of
- 2 administering to the mammal an effective amount of one or more compounds according to any
- 3 one of claims 1-32.

- 1 37. A method of treating a proliferative disease in a mammal comprising the step of
- 2 administering to the mammal an effective amount of one or more compounds according to any
- 3 one of claims 1-32.
- 1 38. A method of treating a viral infection in a mammal comprising the step of administering
- 2 to the mammal an effective amount of one or more compounds according to any one of claims
- 3 1-32.
- 1 39. A method of treating an inflammatory disease in a mammal comprising the step of
- 2 administering to the mammal an effective amount of one or more compounds according to any
- 3 one of claims 1-32.
- 1 40. A method of treating a gastrointestinal motility disorder in a mammal comprising the step
- 2 of administering to the mammal an effective amount of one or more compounds according to any
- 3 one of claims 1-32.
- 1 41. A method of treating a disorder in a mammal comprising the step of administering to the
- 2 mammal an effective amount of one or more compounds according to any one of claims 1-32
- 3 thereby to ameliorate a symptom of the disorder, wherein the disorder is selected from the group
- 4 consisting of:
- a skin infection, nosocomial pneumonia, post-viral pneumonia, an abdominal infection, a
- 6 urinary tract infection, bacteremia, septicemia, endocarditis, an atrio-ventricular shunt
- infection, a vascular access infection, meningitis, surgical prophylaxis, a peritoneal
- 8 infection, a bone infection, a joint infection, a methicillin-resistant Staphylococcus aureus
- 9 infection, a vancomycin-resistant *Enterococci* infection, a linezolid-resistant organism
- infection, and tuberculosis.
- 1 42. The method according to any one of claims 34-41, wherein the compound is administered
- 2 orally, parentally, or topically.
- 1 43. A method of synthesizing a compound according to any one of claims 1-32.
- 1 44. A medical device containing one or more compounds according to any one of claims
- 2 1-32.
- 1 45. The medical device according to claim 44, wherein the device is a stent.

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